

**In the Claims:**

1. (original) An angle measuring system comprising:  
  
a rotor that rotates about an axis of rotation;  
  
a scanning unit spaced from said rotor, said scanning unit attached to a stator;  
  
a base;  
  
a coupling connected to said base and said stator so that a torsion-proof connection between said base and said stator results, wherein said coupling permits radial and axial compensating movements of said stator with respect to said base and said axis of rotation, wherein a first stop at said base and a second stop at said stator limit said radial and axial compensating movements.
2. (original) The angle measuring system of claim 1, wherein said coupling is produced in one piece as a punched and bent element.
3. (original) The angle measuring system of claim 1, wherein said coupling is fastened on said base by a first screw, and said coupling is fastened on said stator by a second screw.
4. (original) The angle measuring system of claim 2, wherein said coupling is fastened on said base by a first screw, and said coupling is fastened on said stator by a second

screw.

5. (original) The angle measuring system of claim 3, wherein said second stop at said stator is defined, at least in part, by said first screw projecting into an opening of said stator.

6. (previously amended) The angle measuring system of claim 3, wherein said first stop at said base is defined, at least in part, by said second screw projecting into an opening of said base.

7. (previously amended) The angle measuring system of claim 5, wherein said first stop at said base is defined, at least in part, by said second screw projecting into an opening of said base.

8. (original) The angle measuring system of claim 5, wherein said opening of said stator is embodied as an elongated hole.

9. (original) The angle measuring system of claim 6, wherein said opening of said base is embodied as an elongated hole.

10. (original) The angle measuring system of claim 7, wherein said opening of said stator is embodied as a first elongated hole and said opening of said base is embodied as a second elongated hole.

11. (previously amended) The angle measuring system of claim 1, wherein said first stop at said base comprises a projecting strip on said base.

12. (original) The angle measuring system of claim 11, wherein said coupling is screwed to said projecting strip by said first screw.

13. (new) The angle measuring system of claim 1, wherein said axial compensating movement is performed in a direction parallel to said axis of rotation.

14. (new) The angle measuring system of claim 1, wherein said radial compensating movement is performed in two radial directions that are perpendicular to one another.

15. (new) The angle measuring system of claim 13, wherein said radial compensating movement is performed in two radial directions that are perpendicular to one another and perpendicular to said axis of rotation.

16. (new) The angle measuring system of claim 10, wherein said axial compensating movement is performed in a direction parallel to said axis of rotation.

17. (new) The angle measuring system of claim 10, wherein said radial compensating movement is performed in two radial directions that are perpendicular to one another.

18. (new) The angle measuring system of claim 16, wherein said radial compensating movement is performed in two radial directions that are perpendicular to one another and perpendicular to said axis of rotation.